

Std Library Function	Meaning
<code>char s[n]</code>	$n \subseteq \text{alloc}(s)$
<code>strlen(s)</code>	$\text{len}(s) - 1$
<code>strcpy(dst, src)</code>	$\text{len}(\text{src}) \subseteq \text{len}(\text{dst})$
<code>strncpy(dst, src, n)</code>	$\max(\text{len}(\text{src}), n) \subseteq \text{len}(\text{dst})$
<code>s = "string"</code>	$7 \subseteq \text{len}(s), 7 \subseteq \text{alloc}(s)$
<code>p = malloc(n)</code>	$n \subseteq \text{alloc}(p)$
<code>p = strdup(s)</code>	$\text{len}(s) \subseteq \text{len}(p), \text{alloc}(s) \subseteq \text{alloc}(p)$
<code>strcat(s, suffix)</code>	$\text{len}(s) + \text{len}(\text{suffix}) - 1 \subseteq \text{len}(s)$
<code>strncat(s, suffix, n)</code>	$\text{len}(s) + \min(\text{len}(\text{suffix}) - 1, n) \subseteq \text{len}(s)$
<code>p = getenv(. . .)</code>	$[1, \infty] \subseteq \text{len}(p), [1, \infty] \subseteq \text{alloc}(p)$
<code>gets(s)</code>	$[1, \infty] \subseteq \text{len}(s)$
<code>fgets(s,n)</code>	$[1, n] \subseteq \text{len}(s)$
<code>sprintf(dst, "%s", src)</code>	$\text{len}(\text{src}) \subseteq \text{len}(\text{dst})$
<code>sprintf(dst, "%d", n)</code>	$[1, 20] \subseteq \text{len}(\text{dst})$
<code>snprintf(dst, n, "%s", src)</code>	$\min(\text{len}(\text{src}), n) \subseteq \text{len}(\text{dst})$
<code>p[n] = '\0'</code>	$\min(\text{len}(p), n + 1) \subseteq \text{len}(p)$
<code>h = gethostbyname(. . .)</code>	$[1, \infty] \subseteq \text{len}(), [-\infty, \infty] \subseteq (\text{h} \rightarrow \text{h_length})$

Table 1